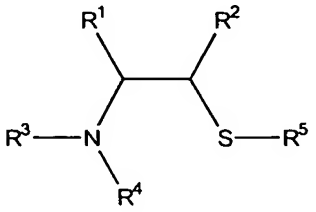
WHAT IS CLAIMED IS:

1. An aminothiol compounds, having a general formula I,



I

wherein R^1 is aryl or alkyl of C1-C9;

R^2 is aryl or alkyl of C1-C9

R^3 is aryl or alkyl of C1-C9;

R^4 is aryl or alkyl of C1-C9; or

R^3, R^4 and N form a three-to-eight-membered heterocycle; and

R^5 is H or alkyl of C1-C6.

2. The aminothiol compound as claimed in claim 1, wherein R^1 is aryl or alkyl of C1-C6.

3. The aminothiol compound as claimed in claim 1, wherein R^2 is aryl or alkyl of C1-C6.

4. The aminothiol compound as claimed in claim 1, wherein R^3 is alkyl of C1-C6.

5. The aminothiol compound as claimed in claim 1, wherein R^4 is alkyl of C1-C6.

6. The aminothiol compound as claimed in claim 1, wherein R^3, R^4 and N form a three-to-eight-membered heterocycle.

7. The aminothiol compound as claimed in claim 1, wherein R^5 is H.

8. The aminothiol compound as claimed in claim 1, wherein R^5 is alkyl of C1-C3.

9. The aminothiol compound as claimed in claim 1, which is used for catalyzing an asymmetric addition reaction of an organic metal compound and aldehyde.

10. The aminothiol compound as claimed in claim 9, wherein said organic metal is Zn or Cu.